## **Dell™ 2709W Flat Panel Monitor User's Guide**

#### **About Your Monitor**

Product Features Identifying Parts and Controls Monitor specifications Universal Serial Bus (USB) Interface Card Reader Specifications Plug and Play Capability

#### Setting Up the Monitor

Connecting the Monitor Organizing the Cables
Attaching the Soundbar (optional)

#### Operating the Monitor

Using the Front Panel Controls Using the On-Scree Display (OSD) Setting the Optimal Resolution Using the Dell Soundbar (Optional) Using the Tilt, Swivel and Vertical Extension

## Solving Problems

Troubleshooting Your Monitor Common Problems Video Problems Product Specific Problems
Universal Serial Bus (USB) Specific Problems Troubleshooting the Dell™ Soundbar (Optional)

#### Appendix

CAUTION: Safety Instruction FCC Notice (U.S. Only) and Other Regulatory Information Contacting Dell

#### Notes, Notices, and Cautions

Throughout this guide, blocks of text may be accompanied by an icon and printed in bold type or in italic type. These blocks are notes, notices, and cautions, and they are used as follows:



NOTE: A NOTE indicates important information that helps you make better use of your computer.



NOTICE: A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.



⚠ CAUTION: A CAUTION indicates the potential for property damage, personal injury, or death.

Some warnings may appear in alternate formats and may be unaccompanied by an icon. In such cases, the specific presentation of the caution is mandated by regulatory authority.

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Model 2709Wb

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#### Back to Contents Page

## **About Your Monitor**

**Dell™ 2709W Flat Panel Monitor User's Guide** 

- Product Features
- Identifying Parts and Controls
- Monitor Specifications
- Universal Serial Bus (USB) Interface
- Card Reader Specifications
- Plug and Play Capability
- Maintenance Guidelines

#### **Product Features**

The 2709W flat panel display has an active matrix, thin-film transistor (TFT), liquid crystal display (LCD). The monitor features include:

- 27-inch (583.7\*365.5 mm) viewable area display.
- 1920 x 1200 resolution, plus full-screen support for lower resolutions.
- Wide viewing angle to allow viewing from a sitting or standing position, or moving side-to-side.
- Tilt, swivel and vertical extension capabilities.
- Removable pedestal and Video Electronics Standards Association (VESA) 100 mm mounting holes for flexible mounting solutions.
- Plug and play capability if supported by your system.
- On-Screen Display (OSD) adjustments for ease of set-up and screen optimization.
- Software and documentation CD includes an information file (INF), Image color Matching File (ICM), and product documentation.
- Energy Saver feature for Energy Star compliance.
- Security lock slot.

# **Identifying Parts and Features**

#### **Front View**



Front View

Front panel controls

Label Description

Shortcut key

- \*The default settings are Preset Modes Select, Brightness/Contrast Select and Input Source Select.
  - 1 Preset Modes Select
  - 2 Brightness/Contrast Select

- 3 Input Source Select
- 4 OSD menu select
- 5 EXIT
- 6 Power button (with power light indicator)

# **Back View**

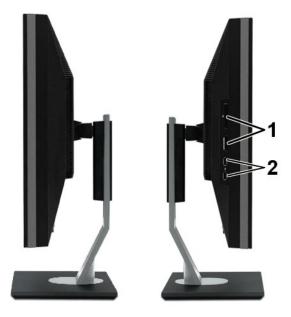


Back view

**Back View with monitor stand** 

	Label	Description/Use
1	VESA mounting holes (100mm) (Behind attached VESA Plate)	To mount the monitor.
2	Connectors label	To indicate the positions and types of connectors.
3	Service Tag label	To contact Dell for express service.
4	Security lock slot	To help secure your monitor.
5	Dell Soundbar mounting brackets	To attach the optional Dell Soundbar.
6	Barcode serial number label	To contact Dell for technical support.
7	Regulatory rating label	Lists the regulatory approvals.
8	Cable management slot	To organize cables by placing them through the slot.

# Side View



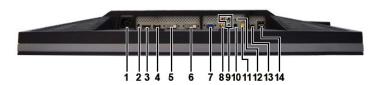
Right side

Left side

Label	Description
1	Card reader. See <u>Card Reader Specifications</u> for more information.
2	USB downstream ports

# **Bottom View**





## Bottom view

Label	Description	
1	AC power cord connector	
2	DC power connector for $Dell^{\text{TM}}$ Soundbar	
3	DisplayPort connector	
4	HDMI connector	

- 5 DVI connector-1
- 6 DVI connector-2
- 7 VGA connector
- Composite video connector
- Component video connectors
- 10 Audio out (rear)
- 11 Audio out (SUB/CTR)
- 12 Audio out (front)
- 13 USB upstream port
- 14 USB downstream ports

## **Monitor Specifications**

The following sections give you information about the various power management modes and pin assignments for various connectors for your monitor.

#### **Power Management Modes**

If you have VESA's DPMS compliance display card or software installed in your computer, the monitor automatically reduces its power consumption when not in use. This is referred to as Power Save Mode. If input from keyboard, mouse or other input devices is detected by the computer, the monitor will automatically "wake up". The following table shows the power consumption and signaling of this automatic power-saving feature:

VESA Modes	Horizontal Sync	Vertical Sync	Video	Power Indicator	Power Consumption
Normal operation	Active	Active	Active	Blue	160 W (maximum)* 105 W (normal)**
Active-off mode	Inactive	Inactive	Blanked	Amber	Less than 2 W
Switch off	-	-	-	Off	Less than 1 W

NOTE: Zero power consumption in OFF mode can only be achieved by disconnecting the main cable from the monitor.

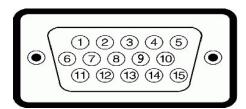
Activate the computer and wake up the monitor to gain access to the OSD.





# **VGA** Connector

Pin Assignments

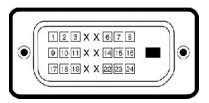


Pin Number	15-pin Side of the Connected Signal Cable
1	Video- <b>Red</b>
2	Video-Green
3	Video-Blue
4	GND
5	Self-test
6	GND-R
7	GND-G

<sup>\*</sup> With Audio and USB \*\* Without Audio and USB

<u> </u>	
8	GND-B
9	Computer 5V/3.3V
10	GND-sync
11	GND
12	DDC data
13	H-sync
14	V-sync
15	DDC clock

#### **DVI** Connector



Pin Number	24-pin Side of the Connected Signal Cable
1	TMDS RX2-
2	TMDS RX2+
3	TMDS Ground
4	Floating
5	Floating
6	DDC Clock
7	DDC Data
8	Floating
9	TMDS RX1-
10	TMDS RX1+
11	TMDS Ground
12	Floating
13	Floating
14	+5V/+3.3V power
15	Self test
16	Hot Plug Detect
17	TMDS RX0-
18	TMDS RX0+
19	TMDS Ground
20	Floating
21	Floating
22	TMDS Ground
23	TMDS Clock+
24	TMDS Clock-

Composite Video Connector



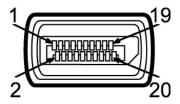
Luma composite chroma

# Component Video Connector



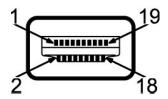
Pin Number	3-pin Side of the Connected Signal Cable (Cable not included)
1	Y (Luminance signal)
2	Pb (Color differential signal)
3	Pr (Color differential signal)

# DisplayPort Connector



Pin Number	20-pin Side of the Connected Signal Cable
1	MLO(p)
2	GND
3	MLO(n)
4	ML1(p)
5	GND
6	ML1(n)
7	ML2(p)
8	GND
9	ML2(n)
10	ML3(p)
11	GND
12	ML3(n)
13	GND
14	GND
15	AUX(p)
16	GND
17	AUX(n)
18	HPD
19	Re-PWR
20	PWR

# **HDMI** Connector



Pin Number	19-pin Side of the Connected Signal Cable
1	TMDS DATA 2+
2	TMDS DATA 2 SHIELD
3	TMDS DATA 2-
4	TMDS DATA 1+
5	TMDS DATA 1 SHIELD
6	TMDS DATA 1-
7	TMDS DATA 0+
8	TMDS DATA 0 SHIELD
9	TMDS DATA 0-
10	TMDS CLOCK
11	TMDS CLOCK SHIELD
12	TMDS CLOCK-
13	Floating
14	Floating
15	DDC CLOCK (SDA)
16	DDC DATA (SDA)
17	GROUND
18	+5V POWER
19	HOT PLUG DETECT

# **Flat Panel Specifications**

Screen type	Active matrix - TFT LCD	
Screen dimensions	27 inches (27-inch diagonal viewable image size)	
Preset display area:		
Horizontal	581.76 mm (22.9 inches)	
Vertical	363.6 mm (14.30 inches)	
Pixel pitch	0.303 mm	
Viewing angle	178° (Vertical) typical, 178° (Horizontal) typical	
Luminance output	400 cd/m <sup>2</sup> (typ)	
Contrast ratio	1300:1 (typ), 3000:1 (typ, Dynamic Contrast on)	
Faceplate coating	Antiglare with hard-coating 3H	
Backlight	8 CCFL U-type system	
Response Time	6ms panel typical (Grey to Grey))/16ms typical (Black to White)	
Color Gamut	110%* typical	

<sup>\* 2709</sup>W Color Gamut (Typical) is based on CIE1976 (110%) and CIE1931 (102%) .

#### Resolution

Horizontal scan range	30 kHz to 81 kHz (automatic)
Vertical scan range	56 Hz to 76 Hz
Optimal preset resolution	1920 x 1200 at 60 Hz
Highest preset resolution	1920 x 1200 at 60 Hz

# **Video Supported Modes**

Video display capabilities (DVI playback) 480p/576p/720p/1080p (Supports HDCP)

Video display capabilities (Composite playback) NTSC/PAL

Video display capabilities (HDMI playback) 480i/480p/576i/576p/720p/1080i/1080p

Video display capabilities (Component playback) 480i/480p/576i/576p/720p/1080i/1080p

# **Preset Display Modes**

The following table lists the preset modes for which Dell guarantees image size and centering:

Display Mode	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock (MHz)	Sync Polarity (Horizontal/Vertical)
VGA, 720 x 400	31.5	70.1	28.3	-/+
VGA, 640 x 480	31.5	59.9	25.2	-/-
VESA, 640 x 480	37.5	75.0	31.5	-/-
VESA, 800 x 600	37.9	60.3	40.0	+/+
VESA, 800 x 600	46.9	75.0	49.5	+/+
VESA, 1024 x 768	48.4	60.0	65.0	-/-
VESA, 1024 x 768	60.0	75.0	78.8	+/+
VESA, 1152 x 864	67.5	75.0	108.0	+/+
VESA, 1280 x 1024	64.0	60.0	108.0	+/+
VESA, 1280 x 1024	80.0	75.0	135.0	+/+
VESA, 1600 x 1200	75.0	60.0	162.0	+/+
VESA, 1920 x 1200	74.5	60.0	154.0	+/-

## **Electrical**

The following table lists the electrical specification:

Video input signals	Analog RGB, 0.7 Volts +/-5%, 75 ohm input impedance Digital DVI-D TMDS, 600mV for each differential line, 50 ohm input impedance HDMI, 600mV for each differential line, 100 ohm input impedance per differential pair DisplayPort, 600mV for each differential line, 100 ohm input impedance per differential pair Composite, 1 volt(p-p), 75 ohm input impedance Component: Y, Pb, Pr are all 0.5~1volt(p-p), 75 ohm input impedance
Synchronization input signals	separate horizontal and vertical, 3.3V CMOS or 5V TTL level, positive or negative sync. SOG (Sync on green)
AC input voltage/frequency/current	100 to 240 VAC/50 or 60 Hz <u>+</u> 3 Hz/2.0A (Max.)
Inrush current	120V: 40A (Max.) 240V: 80A (Max.)

## **Physical Characteristics**

The following table lists the physical characteristics:

Connector type

D-sub: blue connector DVI-D: white connector DisplayPort: black connector

Composite Component HDMI

Signal cable type 1 D-sub: Detachable, Analog, 15pin, shipped attached to the

monitor
DVI-D: Detachable, Digital, 24pin, shipped detached from

the monitor
DisplayPort: Detachable, Digital, 20pin, shipped detached from the monitor

Composite Component HDMI

NOTE: The composite, component and HDMI cables are not included with the monitor.

Dimensions (with stand)

Height (Compressed) 451.9 mm (17.79 inches)

Height (Extended) 541.9 mm (21.33 inches)

Width 632.1 mm (24.89 inches)

Depth 200.0 mm (7.87 inches)

Dimensions (without stand)

Height 413.9 mm (16.30 inches)

Width 632.1 mm (24.89 inches)

88.4 mm (3.48 inches) Depth

Stand Dimensions

Height (Compressed) 306 mm (12.05 inches)

Height (Extended) 396 mm (15.59 inches)

Width 320 mm (12.60 inches)

200.0 mm (7.87 inches) Depth

Weight

Weight with packaging 14.3 kg (31.53 lb)

Weight with stand assembly and cables 12.2 kg (26.90 lb)

Weight without stand assembly (For wall mount or VESA mount considerations - no cables)

8.3 kg (18.30 lb)

Weight of stand assembly 2.7 kg (5.95 lb)

#### **Environmental**

The following table lists the environmental limitation:

Temperature

0° to 40°C (32° to 104°F) Operating

Nonoperating

Storage: -20° to 60°C (-4° to 140°F) Shipping: -20° to 60°C(-4° to 140°F)

Humidity

10% to 80% (noncondensing) Operating

Storage: 5% to 90% (noncondensing) Shipping: 5% to 90%(noncondensing) Nonoperating

Altitude

3,657.6 m (12,000 ft) max Operating

12,192 m (40,000 ft) max Nonoperating

375 BTU/hour (maximum) 195 BTU/hour (typical) Thermal dissipation

# Universal Serial Bus (USB) Interface

This monitor supports High-Speed Certified USB 2.0 interface.

Transfer speed	Data Rate	Power Consumption
High speed	480 Mbps	2.5W (Max., each port)
Full speed	12 Mbps	2.5W (Max., each port)
Low speed	1.5 Mbps	2.5W (Max., each port)

# **USB Upstream Connector**



Pin Number	4-pin Side of the connector
1	DMU
2	vcc
3	DPU
4	GND

#### **USB Downstream Connector**



Pin Number	4-Pin Side of the Signal Cable	
1	vcc	
2	DMD	
3	DPD	
4	GND	

#### **USB Ports**

- 1 1 upstream rear 1 4 downstream 2 on rear; 2 on left side

NOTE: The monitor's 2.0 USB interface functions only if the computer is USB 2.0 compatible.

NOTE: The monitor's USB interface works only when the monitor is on or in power save mode. If you switch the monitor off and then switch it on, the attached peripherals may take a few seconds to resume normal functionality.

# **Card Reader Specifications**

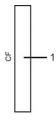
#### Overview

- 1 The Flash Memory Card Reader is a USB storage device that allows users to read and write information from and into the memory card.
- 1 The Flash Memory Card Reader is automatically recognized by Microsoft® Windows® 2000, Windows® XP and Windows Vista®.
- 1 Once installed and recognized, each separate memory card (slot) appears as a separate drive/drive letter
- 1 All standard file operations (copy, delete, drag-and-drop, etc.) can be performed with this drive.

#### **Features**

The Flash Memory Card Reader has the following features:

- 1 Supports Microsoft® Windows® 2000, Windows® XP and Windows Vista® operating systems
- 1 No Microsoft® Windows® 9X support from Dell
- 1 Mass Storage Class device (No drivers are required under Microsoft® Windows® 2000, Windows® XP and Windows Vista®)
- 1 USB-IF certification
- 1 Supports various memory card media





The following table lists the memory cards supported:

Slot Number	Flash memory cards type	
1	Compact Flash type I/II Card (CF I/II)/CF form factor ATA hard drives to USB 2.0 but	
2	xD-Picture Card Memory Stick Card (MS)/High Speed Memory Stick (HSMS)/Memory Stick Pro Card (MS PRO)/Memory Stick Duo (with Adapter) Secure Digital Card (SD)/Mini Secure Digital (with Adapter)/TransFlash Card (with Adapter) MultiMedia Card (MMC)/Reduced Size MultiMedia Card (with Adapter)	

## Maximum Card Capacity Supported by the 2709W card reader

		Capacity by Spec	( <b>For</b> 2709W)
Compact Flash Specification	2.0	128GB	Supported
Memory Stick Standard Format Specification	1.40-00	128MB	Supported
Memory Stick Pro Standard Format Specifications	1.01-01	32GB	Supported
Memory Stick Duo Standard Format Specifications	1.10-00	128MB/32GB	Supported
SmartMedia™ Electrical Specification	1.40		
SmartMedia™ Physical Format Specifications		256MB	Supported
	Memory Stick Standard Format Specification  Memory Stick Pro Standard Format Specifications  Memory Stick Duo Standard Format Specifications  SmartMedia™ Electrical Specification	Memory Stick Standard Format Specification       1.40-00         Memory Stick Pro Standard Format Specifications       1.01-01         Memory Stick Duo Standard Format Specifications       1.10-00         SmartMedia™ Electrical Specification       1.40	Memory Stick Standard Format Specification     1.40-00     128MB       Memory Stick Pro Standard Format Specifications     1.01-01     32GB       Memory Stick Duo Standard Format Specifications     1.10-00     128MB/32GB       SmartMedia™ Electrical Specification     1.40

	SmartMedia™ Logical Format Specifications	1.30		
xD	xD Picture Card Specification	1.2	2GB	Supported
SD	SD Memory Card Specifications	2.0	32GB	Supported
MMC	MultiMedia Card System Specification	4.2	32GB	Supported

NOTE: MSPRO includes MSPRO Duo and MS Micro.

NOTE: xD includes TypeM and TypeH.

NOTE: SD includes HS-SD, MiniSD and SD Micro. SD v2.0 spec includes SDHC. NOTE: MMC includes MMCPlus, RS-MMC, MMC Mobile and MMC micro.

#### General

Connection type USB 2.0 High Speed Device (USB Full Speed Device compatible) Supported OS Microsoft® Windows® 2000, Windows® XP and Windows Vista®

#### Performance

Transfer Speed Read: 480 Mb/s (max.)

Write: 480 Mb/s (max.)

## Plug and Play Capability

You can install the monitor in any Plug and Play-compatible system. The monitor automatically provides the computer system with its Extended Display Identification Data (EDID) using Display Data Channel (DDC) protocols so the system can configure itself and optimize the monitor settings. If required, the user can select different settings, but in most cases monitor installation is automatic.

#### **Maintenance Guidelines**

## **Caring for Your Monitor**



CAUTION: Read and follow the <u>Safety Instructions</u> before cleaning the monitor.



**CAUTION:** Before cleaning the monitor, unplug the monitor from the electrical outlet.

 $For best \ practices, \ follow \ the \ instructions \ in \ the \ list \ below \ while \ unpacking, \ cleaning, \ or \ handling \ your \ monitor:$ 

- 1 To clean your antistatic screen, lightly dampen a soft, clean cloth with water. If possible, use a special screen-cleaning tissue or solution suitable for the antistatic coating. Do not use benzene, thinner, ammonia, abrasive cleaners, or compressed air.

  Use a lightly-dampened, warm cloth to clean the plastics. Avoid using detergent of any kind as some detergents leave a milky film on the plastics.

- If you notice a white powder when you unpack your monitor, wipe it off with a cloth.

  Handle your monitor with care as dark-colored monitors may scratch and show white scuff marks more than lighter-colored monitors.

#### **Appendix**

Dell™ 2709W Flat Panel Monitor User's Guide

- Safety Instructions
- FCC Notice (U.S. Only) and Other Regulatory Information
- Contacting Dell

# **CAUTION: Safety Instructions**



**CAUTION:** Use of controls, adjustments, or procedures other than those specified in this documentation may result in exposure to shock, electrical hazards, and/or mechanical hazards.

For information on safety instructions, see the Safety Information.

## FCC Notice (U.S. Only) and Other Regulatory Information

For FCC notices and other regulatory information, see the regulatory compliance website located at <a href="www.dell.com\regulatory">www.dell.com\regulatory</a> compliance.

## **Contacting Dell**

To contact Dell electronically, you can access the following websites and by phone:

- For support through the web, go to support.dell.com.
   For customers in the United States, call 800-WWW-DELL (800-999-3355).



NOTE: If you do not have an active Internet connection, you can find contact information on your purchase invoice, packing slip, bill, or Dell product

Dell provides several online and telephone-based support and service options. Availability varies by country and product, and some services may not be available in your area. To contact Dell for sales, technical support, or customer service issues:

- Visit support.dell.com
- Verify your country or region in the Choose A Country/Region drop-down menu at the bottom of the page.
   Click Contact Us on the left side of the page.
   Select the appropriate service or support link based on your need.
   Choose the method of contacting Dell that is convenient for you.

# Setting Up Your Monitor Dell™ 2709W Flat Panel Monitor

# If you have a Dell™ desktop or a Dell™ portable computer with internet access

- 1. Go to <a href="http://support.dell.com">http://support.dell.com</a>, enter your service tag, and download the latest driver for your graphics card.
- $2. \ After installing the drivers for your Graphics Adapter, attempt to set the resolution to {\bf 1920x1200} \ again.$

**MOTE**: If you are unable to set the resolution to 1920x1200, please contact Dell™ to inquire about a Graphics Adapter that supports these resolutions.

# Setting Up Your Monitor Dell™ 2709W Flat Panel Monitor

# If you have non Dell™ desktop, portable computer, or graphic card

- 1. Right-click on the desktop and click Properties.
- 2. Select the Settings tab.
- 3. Select Advanced.
- 4. Identify your graphics controller supplier from the description at the top of the window (e.g. NVIDIA, ATI, Intel etc.).
- $5. \ Please \ refer \ to \ the \ graphic \ card \ provider \ website \ for \ updated \ driver \ (for \ example, \ \underline{http://www.ATI.com} \ OR \ \underline{http://www.NVIDIA.com} \ ).$
- $6. \ After \ installing \ the \ drivers \ for \ your \ Graphics \ Adapter, \ attempt \ to \ set \ the \ resolution \ to \ \textbf{1920x1200} \ again.$

NOTE: If you are unable to set the resolution to 1920x1200, please contact the manufacturer of your computer or consider purchasing a graphics adapter that will support the video resolution of 1920x1200.

# Operating the Monitor Dell™ 2709W Flat Panel Monitor User's Guide

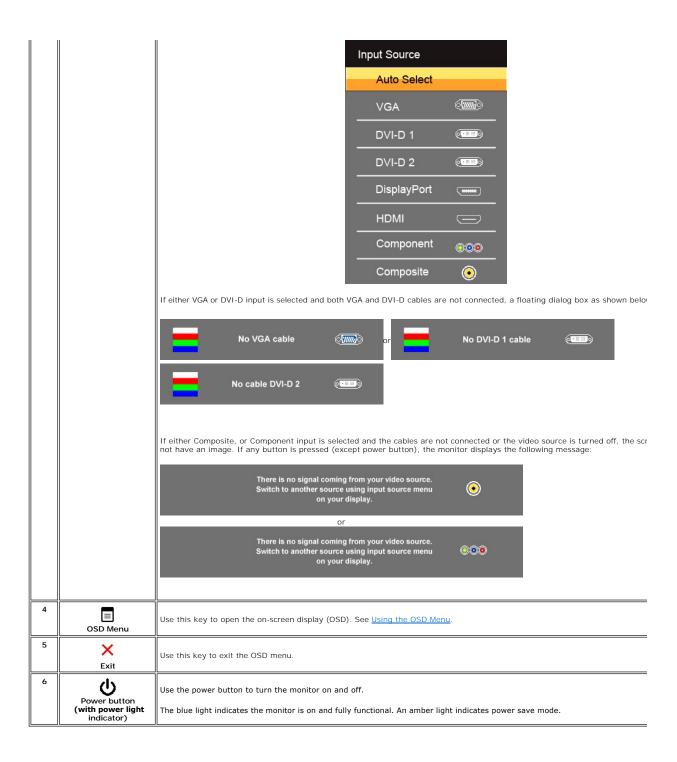
- Using the Front Panel Controls
- Using the On-Scree Display (OSD) Menu
- Setting the Optimal Resolution
- Using the Dell Soundbar (Optional)
- Using the Tilt, Swivel and Vertical Extension

# **Using the Front Panel**

Use the buttons on the front of the monitor to adjust the image settings.



1-3	Shortcut keys	Use this key for direct access to the control menu that you define in the personalize menu.	
		*The default settings are Preset Modes Select, Brightness/Contrast Select and Input Source Select.	
1	Preset Modes Select	Use this button for different displays on your monitor.	
2	Brightness/Contrast	Use this button for direct access to the "Brightness/Contrast" control menu.	
3	Ð	Use Input Source Select button to select between different video signals that may be connected to your monitor.	
	Input Source Select	1 VGA input 1 DVI-D 1 input 1 DVI-D 2 input 1 DisplayPort input 1 HDMI input 1 Component video input 1 Composite video input 1 Composite video input  Displays the source selection bar. Press   and  buttons to move between the setting options and press   to select the ir you want.	



## Using the OSD Menu

NOTE: If you change the settings and then either proceed to another menu, or exit the OSD menu, the monitor automatically saves the changes. The changes are also saved if you change the settings and then wait for the OSD menu to disappear.

1. Press to launch the OSD menu and display the main menu.



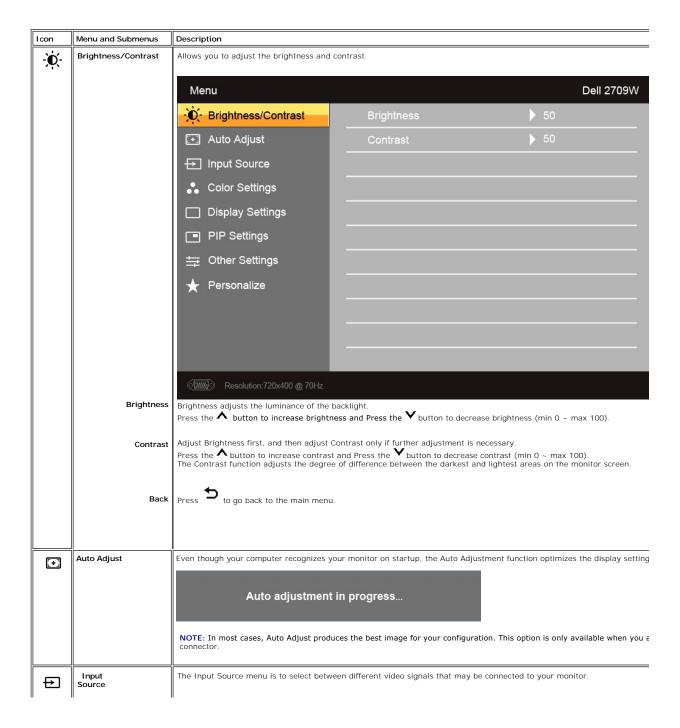
Or

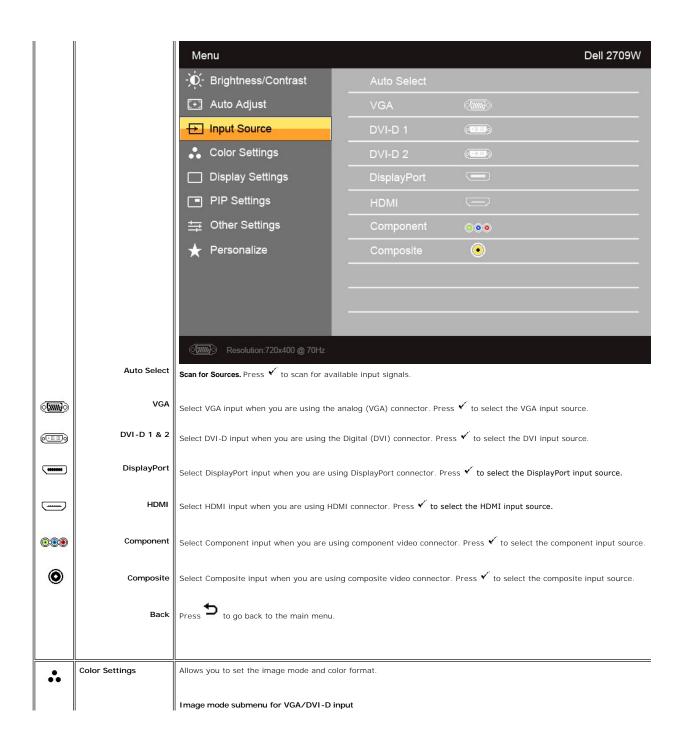
#### Main Menu for non Analog (non VGA) Input

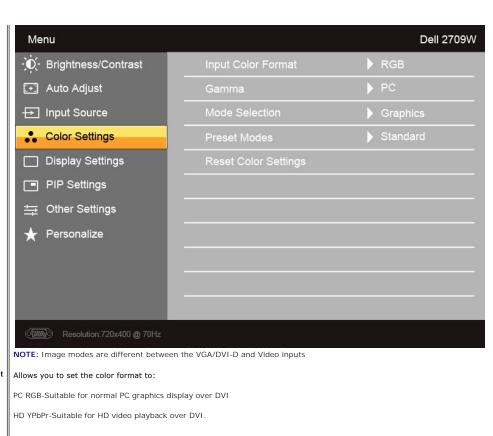


NOTE: Auto Adjust is only available when you are using the analog (VGA) connector.

- 2. Press the  $\bigvee$  and  $\bigwedge$  buttons to move between the setting options. As you move from one icon to another, the option name is highlighted. See the table for a complete list of all the options available for the monitor.
- 3. Press the V button once to activate the highlighted option.
- 4. Press **Y** and **\Lambda** button to select the desired parameter.
- 5. Press  $\checkmark$  to enter the slide bar and then use the  $\checkmark$  and  $\land$  buttons, according to the indicators on the menu, to make your changes.







#### Input Color Format

Gamma

Allows you to set the color mode to PC or Mac.

Mode Select

Allows you to set the display mode to Graphics or Video. If your computer is connected to your monitor, choose Graphics. If

Preset modes

#### VGA/DVI-D input

Standard

Mode suitable for desktop applications.

Multimedia

Mode for multimedia applications, eg video playback.

Game

Mode suitable for gaming applications.

Warm

Select warm mode to obtain a red tint. This color setting is typically used for color-intensive applications (photograph image

Cool

Select cool mode to obtain a bluish tint. This color setting is typically used for text based applications (spreadsheets, progra

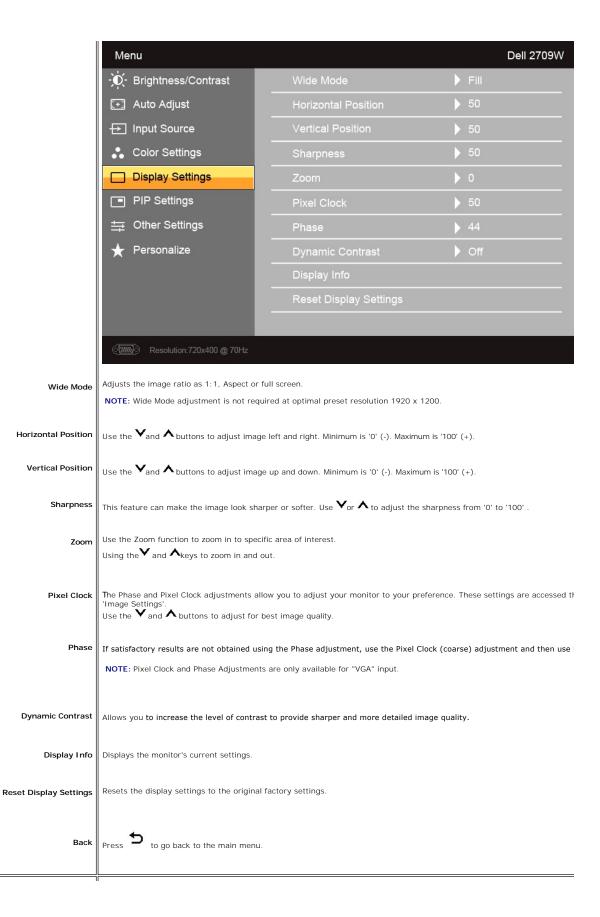
Adobe RGB

This mode is compatible with Adobe RGB (1998).

sRGB

Emulates 72% NTSC color.

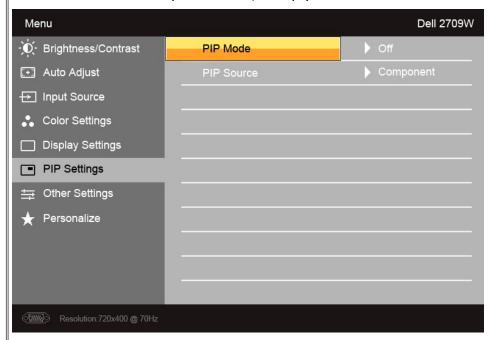
Custom (RGB)	Use the $\bigvee$ or $\bigwedge$ button to increase or decrease each of the three colors (R, G, B) independently, in single-digit increments
Custom (RGBCMY)	Use the Y or A button to increase or decrease each of the six colors (R, G, B, C, M, Y) independently, in single-digit increr
Video input	
Movie	Mode suitable for movie playback.
Game	Mode suitable for game applications.
Sports	Mode suitable for sports scenes.
Nature	Mode suitable for nature scenes.
Hue	This feature can make the video image color shift from green to purple. Use this feature to adjust the skin tone. Use $\checkmark$ or $\checkmark$ increases the green hue in the image increases the purple hue in the image NOTE: Hue adjustment is only available for video input.
Saturation	Allows you to adjust the color saturation of the video image. Use or button to adjust the saturation from '0' to '100' makes video image looks monochrome makes video image looks colorful  NOTE: Saturation adjustment is only available for video input.
Reset Color Settings	Returns your monitor color settings to those that were set at the time of manufacture.
Back	Press to go back to the main menu.
Display Settings	



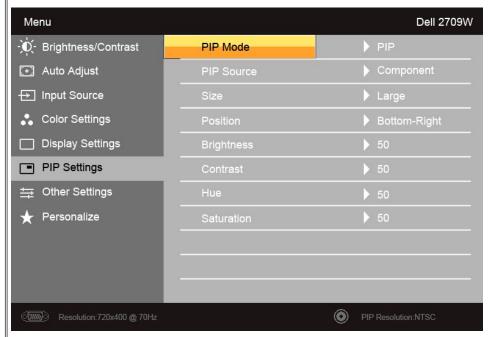
PIP Settings

This function brings up a window displaying image from another input source.

PIP/PBP submenu when PIP/PBP OFF (main source is VGA/DVI-D input)



PIP/PBP submenu when PIP/PBP ON (main source is VGA/DVI-D input)



NOTE: When using DVI source, the contrast adjustment is not available.

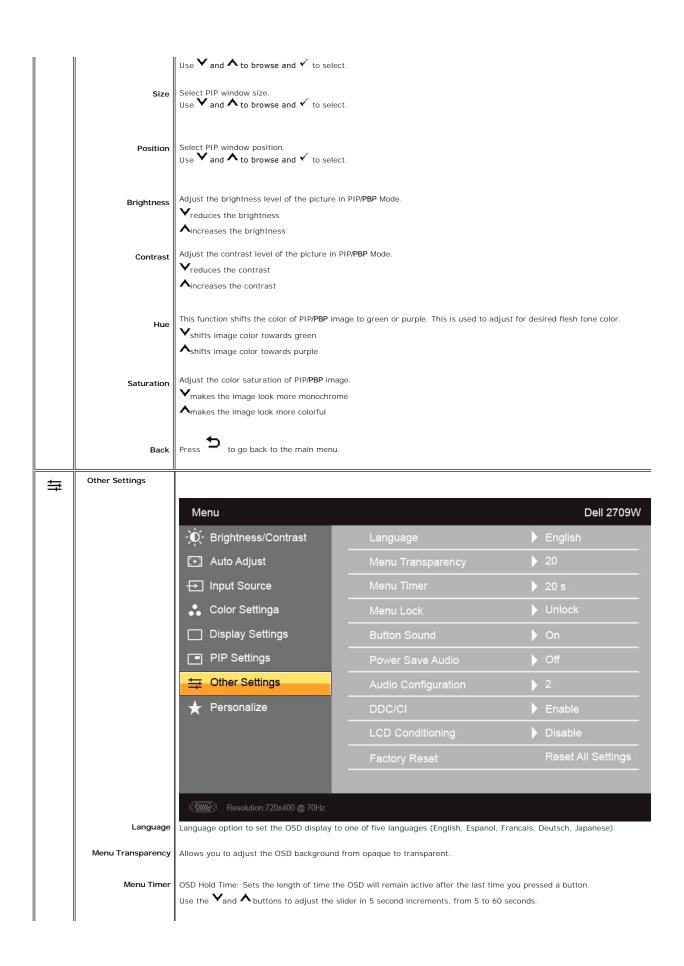
PIP Mode

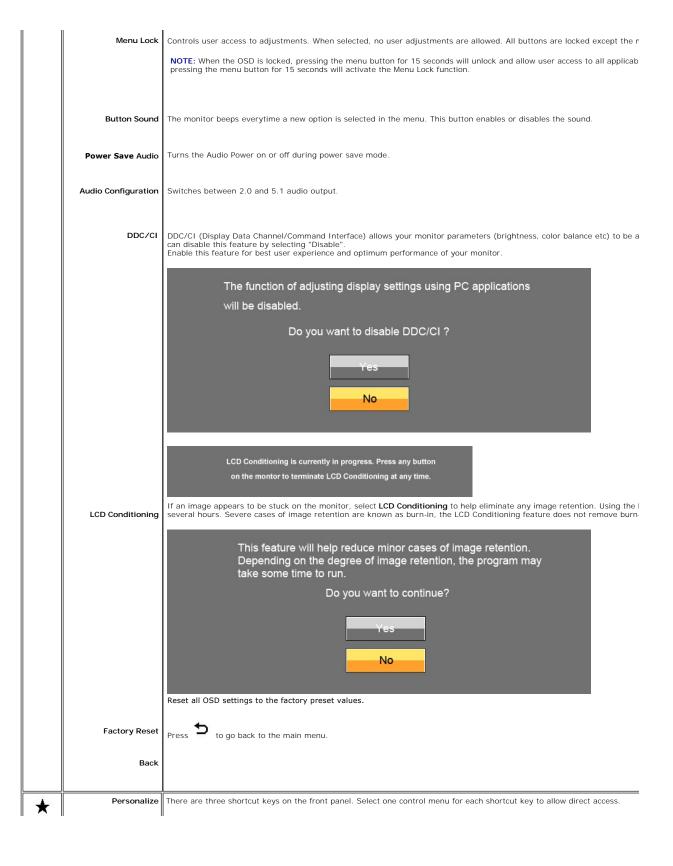
There are two modes: Picture in Picture (PIP) and Picture by Picture (PBP) Use  $\bigvee$  and  $\bigwedge$  to browse and  $\bigvee$  to select "Off", "PIP" or "PBP".

When PIP/PBP activated

When PIP/PBP is activated, select "Swap" to exchange the input source for the main screen and PIP/PBP window.

PIP Source Select an input signal for PIP/PBP. (VGA/DVI-D 1/DVI-D 2/DP (DisplayPort)/HDMI/Composite/Component)





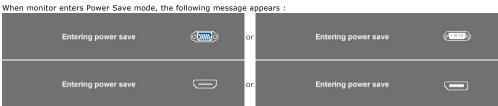


#### **OSD Warning Messages**

When the monitor does not support a particular resolution mode you will see the following message :



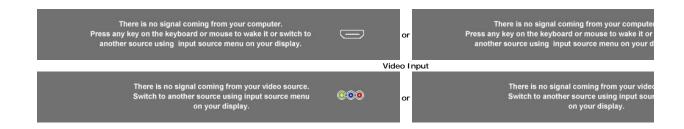
This means that the monitor cannot synchronize with the signal that it is receiving from the computer. See Monitor Specifications for the Horizontal and Vertical fi ranges addressable by this monitor. Recommended mode is 1920 X 1200.



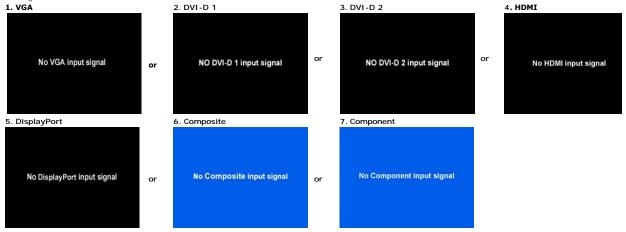
Activate the computer and wake up the monitor to gain access to the OSD

If you press any button other than the power button one of the following messages will appear depending on the selected input:





In PIP mode, when the monitor does not sense the selected second signal input, one of the following messages will appear depending upon the selected input as long as the OSD screen is closed.



If either VGA, DVI-D, HDMI or DisplayPort input is selected and all VGA, DVI-D, HDMI and DisplayPort cables are not connected, a floating dialog box as shown be



MOTE: When the cable is connected back to the input of the monitor, any active PIP/PBP window will disappear. Please enter PIP/PBP submenu to bring ba



See Solving Problems for more information.

#### Setting the Optimal Resolution

- Right-click on the desktop and select Properties.
- Select the **Settings** tab.
- 2. 3. Set the screen resolution to 1920 x 1200.
- Click OK.

If you do not see 1920 x 1200 as an option, you may need to update your graphics driver. Depending on your computer, complete one of the following

If you have a Dell desktop or portable computer:

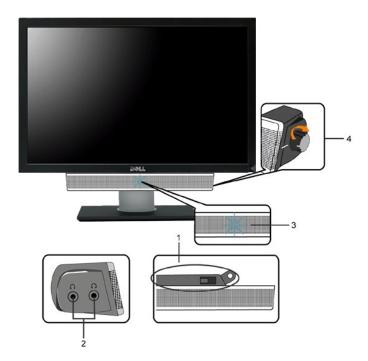
o Go to support.dell.com, enter your service tag, and download the latest driver for your graphics card.

If you are using a non-Dell computer (portable or desktop):

- o Go to the support site for your computer and download the latest graphic drivers.
- o Go to your graphics card website and download the latest graphic drivers.

# **Using the Dell Soundbar (Optional)**

The Dell Soundbar is a stereo two channel system adaptable to mount on Dell flat panel displays. The Soundbar has a rotary volume and on/off control to adjust the overall system level, a blue LED for power indication, and two audio headset jacks.

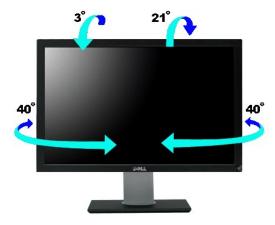


- 1. Attach mechanism
- 2. Headphone connectors
- 3. Power indicator
- 4. Power/Volume control

# Using the Tilt, Swivel and Vertical Extension

## Tilt/Swivel

With the built-in pedestal, you can tilt and/or swivel the monitor for the most comfortable viewing angle.



NOTE: Stand is attached when the monitor is shipped from the factory.

## **Vertical Extension**

Stand extends vertically up to 90 $\pm$ 5mm.



# Setting Up Your Monitor Dell™ 2709W Flat Panel Monitor

# Important instructions to set the display resolution to 1920x1200 (Optimal)

For optimal display performance while using the Microsoft® Windows® operating systems, set the display resolution to 1920 x 1200 pixels by performing the following steps:

- 1. Right-click on the desktop and click Properties.
- 2. Select the **Settings** tab.
- 3. Move the slider-bar to the right by pressing and holding left-mouse button and adjust the screen resolution to 1920x1200.
- 4. Click OK.

If you do not see 1920x1200 as an option, you may need to update your graphics driver. Please choose the scenario below that best describes the computer system you are using, and follow the provided directions:

- 1: If you have a Dell™ desktop or a Dell™ portable computer with internet access.
- 2: If you have non Dell™ desktop, portable computer, or graphic card.

# **Dell™ 2709W Flat Panel Monitor**

- User Guide
- Important instructions to set the display resolution to 1920x1200(Optimal)

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Model 2709Wb

July 2008 Rev. A02

# **Setting Up the Monitor**

**Dell™ 2709W Flat Panel Monitor** User's Guide

- Connecting the Monitor
- Organizing Your Cables
- Attaching the Soundbar (optional)

## **Connecting Your Monitor**

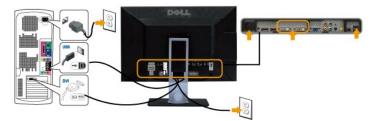


CAUTION: Before you begin any of the procedures in this section, follow the safety instructions.

To connect your monitor to the computer perform the following steps/instructions:

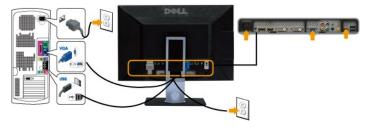
- 1 Turn off your computer and disconnect the power cable.
- Connect either the white (digital DVI-D) display connector cable, the blue (analog VGA) display connector cable, or the black DisplayPort cable to the corresponding video port on the back of your computer. Do not use all the cables on the same computer. Use all the cables only when they are connected to different computers with appropriate video systems.

#### Connecting the White DVI Cable

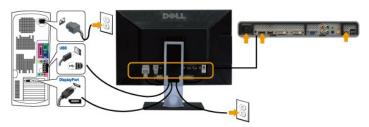


NOTE: Your monitor supports two DVI ports. You can either choose DVI-D 1 or DVI-D 2 via source select button.

## Connecting the Blue VGA Cable



#### Connecting the Black DisplayPort Cable



NOTE: The graphics are used for the purpose of illustration only. Appearance of the the computer may vary.

After you have completed connecting the DVI/VGA/DisplayPort cable, follow the procedure below to complete setting up your monitor:

1 Plug the power cables for your computer and monitor into a nearby outlet.

- Turn on the monitor and the computer.
   If your monitor displays an image, installation is complete. If it does not display an image, see <u>Solving Problems</u>.
   Use the cable management slot on the monitor stand to organize the cables.

# **Organizing Your Cables**



After attaching all necessary cables to your monitor and computer, (See Connecting Your Monitor for cable attachment,) use the cable management slot to neatly organize all cables as shown above.

## Attaching the Soundbar



- 1. Working from the rear of the monitor, attach Soundbar by aligning the two slots with the two tabs along the bottom rear of the monitor.
- 2. Slide the Soundbar to the left until it snaps into place.
- 3. Connect the Soundbar with the DC power connector.
- 4. Insert the mini stereo plug from the rear of the Soundbar into the computer's audio output jack.
- NOTICE: Do not use with any device other than Dell Soundbar
- NOTE: Soundbar Power Connector +12V DC output is for optional Soundbar only.

## **Solving Problems**

Dell™ 2709W Flat Panel Monitor User's Guide

- Monitor Specific Troubleshooting
- Common Problems
- Video Problems
- Product Specific Problems
- Universal Serial Bus (USB) Specific Problems
- <u>Troubleshooting the Dell™ Soundbar (Optional)</u>

CAUTION: Before you begin any of the procedures in this section, follow the Safety Instructions.

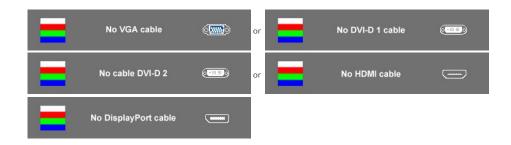
## **Troubleshooting Your Monitor**

#### Self-Test Feature Check (STFC)

Your monitor provides a self-test feature that allows you to check whether your monitor is functioning properly. If your monitor and computer are properly connected but the monitor screen remains dark, run the monitor self-test by performing the following steps:

- 2. Unplug the video cable from the back of the computer. To ensure proper Self-Test operation, remove both Digital (white connector) and the Analog (blue connector) cables from the back of computer.
- 3. Turn on the monitor.

The floating dialog box should appear on-screen (against a black background) if the monitor cannot sense a video signal and is working correctly While in self-test mode, the power LED remains blue. Also, depending upon the selected input, one of the dialogs shown below will continuously scroll



- This box also appears during normal system operation if the video cable becomes disconnected or damaged.
   Turn off your monitor and reconnect the video cable; then turn on both your computer and the monitor.

If your monitor screen remains blank after you use the previous procedure, check your video controller and computer system, because your monitor is functioning properly.



NOTE: Self test feature check is not available for Composite, and Component video modes.

## **OSD Warning Messages**

For OSD-related issues, see OSD Warning Messages

## **Common Problems**

The following table contains general information about common monitor problems you might encounter.

Common Symptoms	Common Symptoms What You Experience	
No Video/ Power LED off	No picture	Ensure that the video cable connecting the monitor and the computer is p and secure.      Verify that the power outlet is functioning properly using any other electric.

		Ensure that the power button is depressed fully.
No Video/ Power LED on	No picture or no brightness	Increase brightness & contrast controls via OSD.     Perform monitor self-test feature check.     Check for bent or broken pins in the video cable connector.
Poor Focus	Picture is fuzzy, blurry, or ghosting	Perform Auto Adjust via OSD. Adjust the Phase and Pixel Clock controls via OSD. Eliminate video extension cables. Reset the monitor to Factory Settings. Change the video resolution to the correct aspect ration (16:10).
Shaky/Jittery Video	Wavy picture or fine movement	Perform Auto Adjust via OSD. Adjust the Phase and Pixel Clock controls via OSD. Reset the monitor to Factory Settings. Check environmental factors. Relocate the monitor and test in another room.
Missing Pixels	LCD screen has spots	Cycle power on-off.     Pixel that is permanently off is a natural defect that can occur in LCD techr
Stuck-on Pixels	LCD screen has bright spots	Cycle power on-off.     Pixel that is permanently off is a natural defect that can occur in LCD techr
Brightness Problems	Picture too dim or too bright	Reset the monitor to Factory Settings.     Auto Adjust via OSD.     Adjust brightness & contrast controls via OSD.
Geometric Distortion	Screen not centered correctly	Reset the monitor to Factory Settings.     Auto Adjust via OSD.     Adjust brightness & contrast controls via OSD.      NOTE: When using 'DVI-D', the positioning adjustments are not available.
Horizontal/Vertical Lines	Screen has one or more lines	1 Reset the monitor to Factory Settings. 1 Perform Auto Adjust via OSD. 1 Adjust Phase and Pixel Clock controls via OSD. 1 Perform monitor self-test feature check and determine if these lines are al mode. 1 Check for bent or broken pins in the video cable connector.
Synchronization Problems	Screen is scrambled or appears torn	NOTE: When using 'DVI-D', the Pixel Clock and Phase adjustments are not avail  Reset the monitor to Factory Settings. Perform Auto Adjust via OSD. Adjust Phase and Pixel Clock controls via OSD. Perform monitor self-test feature check to determine if scrambled screen a test mode. Check for bent or broken pins in the video cable connector. Restart the computer in the safe mode.
Safety Related Issues	Visible signs of smoke or sparks	Do not perform any troubleshooting steps.     Contact Dell immediately.
Intermittent Problems	Monitor malfunctions on & off	Ensure that the video cable connecting the monitor to the computer is cor and is secure.     Reset the monitor to Factory Settings.     Perform monitor self-test feature check to determine if the intermittent prc self-test mode.
Missing Color	Picture missing color	Perform monitor self-test feature check.     Ensure that the video cable connecting the monitor to the computer is cor and is secure.     Check for bent or broken pins in the video cable connector
Wrong Color	Picture color not good	Change the Color Setting Mode in the Color Settings OSD to Graphics or V to the application.     Try different Color Preset Settings in Color Settings OSD. Adjust R/G/B values Settings OSD if the Color Management is turned off.     Change the Input Color Format to PC RGB or YPbPr in the Advance Setting
Image retention from a static image left on the monitor for a long period of time	Faint shadow from the static image displayed appears on the screen	Use the Power Management feature to turn off the monitor at all times who more information, see Power Management Modes).      Alternatively, use a dynamically changing screensaver.

# **Video Problems**

indicator is displayed	Check Video Input Selection     Composite: Yellow colored RCA jack     Component: Red, Blue, Green colored RCA jacks
t crisp and some color distortion	Check DVD connection     O Composite gives good picture     O Component: Red, Blue, Green colored RCA jacks
iinking or discontinuous	Check DVD connection     Composite gives good picture     Component: Red, Blue, Green colored RCA jacks     Check if DVD player is HDCP compliant.     Some non-compliant players may exhibit blinking video and others v raster screen.
	t crisp and some color distortion

# **Product Specific Problems**

SPECIFIC SYMPTOMS	WHAT YOU EXPERIENCE	POSSIBLE SOLUTIONS
Screen image is too small	Image is centered on screen, but does not fill entire viewing area	Perform monitor reset on "Factory Reset"
Cannot adjust the monitor with the buttons on the front panel	OSD does not appear on the screen	Turn the monitor off and unplug the power cord and then plug back and p
The monitor will not go into power saving mode.	No picture, the LED light is blue. When press "+", "-" or "Menu" key, the message "No Composite input signal " or "No Component input signal " will appear.	Move mouse or hit any key on the keyboard on the computer or activate \( \)     access the OSD to set Audio to "off" state.
No Input Signal when you press the controls.	No picture, the LED light is blue. When you press "+", "." or "Menu" key, the message " No Composite input signal " or " No Component input signal " will appear.	Check the signal source Make sure the Computer is not in power saving be mouse or pressing any key on the keyboard.     Check to make sure Video Source to Composite or Component is powered video media.     Check whether the signal cable is plugged in and seated properly. Re-plu if necessary.     Re-boot the computer or video player.
The monitor will not fill the entire screen.	The picture can't fill the height or width of the screen.	Due to the non-standard formats of DVDs, the monitor may not show the pictures.

MOTE: When choosing DVI-D, DisplayPort, HDMI, Composite or Component video, Auto Adjust function is not available.

# Universal Serial Bus (USB) Specific Problems

SPECIFIC SYMPTOMS	WHAT YOU EXPERIENCE	POSSIBLE SOLUTIONS
USB interface is not working	USB peripherals are not working	Check that your monitor is powered ON.     Reconnect the upstream cable to your computer.     Reconnect the USB peripherals (downstream connector).     Switch off and then turn on the monitor again.     Reboot the computer.
High Speed USB 2.0 interface is slow.	High Speed USB 2.0 peripherals working slowly or not at all.	Check that your computer is USB 2.0 capable.     Verify USB 2.0 source on your computer.     Reconnect the upstream cable to your computer.     Reconnect the USB peripherals (downstream connector).     Reboot the computer.

# Troubleshooting the Dell™ Soundbar

COMMON SYMPTOMS	WHAT YOU EXPERIENCE	POSSIBLE SOLUTIONS
	No power to Soundbar - the power indicator is off. (built-in DC power supply. i.e. 2709W)	Turn the Power/Volume knob on the Soundbar clockwise to the middle pos power indicator (blue LED) on the front of the Soundbar is illuminated.     Confirm that the power cable from the Soundbar is plugged into the monit Confirm that the monitor has power.     If the monitor has no power, see Monitor Specific Troubleshooting for mon problem.

No Sound	Soundbar has power - power indicator is on.	Plug the audio line-in cable into the computer's audio out jack.     Set all Windows volume controls to their maximum.     Play some audio content on the computer (i.e. audio CD, or MP3).     Turn the Power/Volume knob on the Soundbar clockwise to a higher volun Clean and reseat the audio line-in plug.     Test the Soundbar using another audio source (i.e. portable CD player).
Distorted Sound	Computer's sound card is used as the audio source.	Clear any obstructions between the Soundbar and the user.     Confirm that the audio line-in plug is completely inserted into the jack of t     Set all Windows volume controls to their midpoints.     Decrease the volume of the audio application.     Turn the Power/Volume knob on the Soundbar counter-clockwise to a low Clean and reseat the audio line-in plug.     Troubleshoot the computer's sound card.     Test the Soundbar using another audio source (i.e. portable CD player).
Distorted Sound	Other audio source is used.	Clear any obstructions between the Soundbar and the user.     Confirm that the audio line-in plug is completely inserted into the jack of t     Decrease the volume of the audio source.     Turn the Power/Volume knob on the Soundbar counter-clockwise to a low     Clean and reseat the audio line-in plug.
Unbalanced Sound Output	Sound from only one side of Soundbar	Clear any obstructions between the Soundbar and the user.     Confirm that the audio line-in plug is completely inserted into the jack of t audio source.     Set all Windows audio balance controls (L-R) to their midpoints.     Clean and reseat the audio line-in plug.     Troubleshoot the computer's sound card.     Test the Soundbar using another audio source (i.e. portable CD player).
Low Volume	Volume is too low.	Clear any obstructions between the Soundbar and the user.     Turn the Power/Volume knob on the Soundbar clockwise to the maximum     Set all Windows volume controls to their maximum.     Increase the volume of the audio application.     Test the Soundbar using another audio source (i.e. portable CD player).

# **Troubleshooting the Card Reader**

NOTICE: Do not remove the device while reading or writing media. Doing so may cause loss of data or malfunction in the media.

Problem	Cause	Solution
Drive letter is not assigned. (Windows® XP only)	Conflict with network drive letter.	A. Right-click My Computer on the desktop, and then click Manage. Under Cor Management, click Desk Management.  B. In the list of drives in the right panel, right-click Removable Device and the Drive Letter and Paths.  C. Click Change, and in the drop-down box, specify a drive letter for the Remochoosing one that is not assigned to the mapped network drives.  D. Click OK, and then click OK again
Drive letter is assigned, but the media is not accessible	The media needs reformatting.	Right-click the drive in Explorer and choose <b>Format</b> from the resulting menu.
The media has been ejected during writing or erasing.	Displays the error message, "Error copying file or folder."  Displays the error message, "Cannot write folder (folder name) or file (file name)," during writing, or, "Cannot remove folder (folder name) or file(file name),". While erasing, you cannot write or erase in the same folder or file name.	Format the media for writing or erasing the same folder or file name
Despite the disappearance of the pop-up window, the media has been ejected while the LED was blinking.	Although the pop-up window disappears during writing, if you eject your media while the LED is still blinking, then you cannot complete your action on the media.	Format the media for writing or erasing the same folder or file name.
Cannot format or write on the media.	Write protect switch is enabled.	Verify that the write- protect switch of the media is unlocked.